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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,741	07/25/2001	Kouji Tometsuka	TOME3001/EM/7026	5599

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EXAMINER

KACKAR, RAM N

ART UNIT PAPER NUMBER

1763

DATE MAILED: 05/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,741

Applicant(s)

TOMETSUKA, KOUJI

Examiner

Ram N Kackar

Art Unit

1763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 13-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/26/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-9 and cancellation of non-elected claims 10-12 in Paper No. 10 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1- 7, 13-19 and 21-22 are rejected under 35 U.S.C. 102(b) as being unpatentable over Harada et al (US 5112641).

Harada et al disclose a reaction chamber (Fig 12-12) for processing a plurality of process substrates, a boat, which loads in to the reaction chamber (Fig 12-2), a carrier which transfers the process substrates (Fig 12-7 and 14) and a stocker to store dummy substrates (Fig 12 -7 or 2).

Harada et al do not expressly disclose a gas line. However the reaction chamber is disclosed to be a CVD apparatus (Abstract).

Therefore it would be ^{inherently} obvious for it to have one or more gas lines. The limitation that gas line is for cleaning gas is an intended use.

Claims 2, 3, 6-7, 14-15, 17-19, 21 are rejected as being directed to an intended use. Regarding claim 2 and 14 the intended use of counting is capable of being performed by a control portion (Col 5 lines 30-47). Similarly the disclosed programmable control apparatus is capable of performing all the intended use functions as claimed.

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Claims 4-5, 16 cite only a product, which may be processed by the claimed apparatus and therefore not patentable.

4. Claim 8 and 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harada et al (US 5112641) in view of Nakajima et al (US 5858103). Harada et al disclose a reaction chamber for processing a plurality of process substrates loaded on a boat.

Harada et al do not disclose that the boat is made of quartz.

Nakajima et al disclose a quartz boat inside their reaction chamber (Col 1 line 18-19).

Therefore it would be obvious for one of ordinary skill in the art at the time invention was made to use quartz boat for its cleanliness from contamination and stability at high temperature.

Response to Amendment

Applicant's arguments filed 4/18/2003 have been fully considered but they are not persuasive.

Applicant argues that the claimed invention distinguishes over the prior art of Harada et al, as they have not expressly disclosed a cleaning gas line. As stated earlier, absent any suggestion that a cleaning gas line is inherently different than a gas line used for reaction gas, a cleaning gas line is indirectly disclosed in the reference.

Applicant argues that in Harada et al the intended use of counting the usage of each dummy wafer to determine the cleaning time is not disclosed. Examiner disagrees. Firstly these limitations are for intended use and not patentable. Secondly Harada et al disclose a control portion (Col 5 lines 30-47), which is fully capable of doing counting. In Col 5-8 Harada et al disclose various configurable transfer situations, which depend upon sequencing and counting.

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Applicant acknowledges that Nakajima et al disclose that it was known to use quartz or silicon carbide wafer boats but appears to argue that it was not enough for a motivation.

Examiner disagrees. As wafer boats made of quartz are very common, it would be obvious to have the wafer boat in Harada et al to be made of quartz.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

a. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ram N Kackar whose telephone number is 703 305 3996. The examiner can normally be reached on M-F 8:00 A.M to 5:P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills can be reached on 703 308 1633. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9310 for regular communications and 703 872 9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0661.

RK
May 24, 2003


GREGORY MILLS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700